

WFO Jackson, Mississippi

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

REPORT FOR:

MONTH YEAR

November 2003

SIGNATURE

Alan Gerard, MIC
In Charge of HSA

DATE

December 12th , 2003

TO: Hydrometeorological Information Center, W/OH2
NOAA / National Weather Service
1325 East West Highway, Room 7230
Silver Spring, MD 20910-3283

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (WSOM E-41)

Synopsis...

The first half of November was drier than normal over most areas; however, a series of cold fronts during the remainder of the month produced wetter than normal conditions, except for three most southeastern counties in the HSA.

From the 5th into the 6th, a cold front pushed through the area, producing rainfall over eastern and southeastern portions of the state. Rainfall amounts were .50 inches or less.

Another cold front moved through the state on the 12th, rainfall occurred mainly over northern and some central portions of the HSA. Rainfall totals were generally .25 inches with some amounts around .75 inches over extreme northern HSA counties.

From the 16th until late on the 18th, a deep upper air system pushed east through the HSA with a strong associated surface cold front. Rainfall totals ranged from 1.25 inches to 4.00 inches, with over 6.00 inches reported over southern sections of the HSA in Louisiana. Some 24 hour rainfall amounts: 2.53 inches at Jonesville, LA (17th); 2.43 inches at Jonesville, LA (18th); 2.40 inches at Larto Lake, LA (17th) and (18th); and 2.37 inches at Red River L/D #1 (17th).

From the 23rd into early on the 24th, another strong cold front progressed through the area, bringing rainfall to most portions of the HSA. Rainfall amounts ranged from less than .25 inches over Southeast Mississippi to around 2 inches over the southern sections of the HSA in Louisiana.

The most significant rainfall event occurred from late on the 26th to the early evening on the 27th. A deep upper air system and an associated strong surface cold front moved through the area, bringing some severe weather and heavy rainfall to areas along and south of Interstate 20. Total rainfall amounts for the event ranged from .75 in northwest sections of the HSA to over 7.00 inches from Southern Rankin to central Scott to northeast Newton Counties. Some 36 hour rainfall totals ending at 7am on the 28th were: 7.00 inches at Forest, MS; 7.00 inches at Conehatta, MS; 5.22 inches at Prentiss, MS; 4.60 inches at Collins, MS; 4.60 inches at Paulding, MS; 4.40 inches at Pat Harrison Waterway's Dunn's Falls Wp; 4.39 inches at

Brookhaven, MS; and 4.39 inches at Pat Harrison Waterway's Turkey Creek Wp.

River and Soil Conditions...

The soils continued to dry out during the first half of the month. Agricultural interests in southeastern Arkansas and northeastern Louisiana and western Mississippi were in need of rainfall; however, soils were significantly moistened by three significant rain events during the last half of the month. By month's end, soil moisture was slightly below to near normal over northernmost sections of northeast Louisiana and southeast Arkansas in the Jackson HSA. Soil moisture, for counties in the HSA in extreme southeast Mississippi, was slightly below normal. Soil moisture in counties in eastern Mississippi continued to be above normal. The remainder of the HSA had near normal soil conditions.

Moderate to heavy rainfall on Thanksgiving Day (Nov 27th) over the upper Big Black and in the upper portions of Tuscolameta Creek (upper Pearl River Basin) produced flooding. The Big Black at West experienced moderate flooding of some agricultural lands while the Tuscolameta Creek experienced only minor flooding. Moderate rises below flood stage were noted on portions of the Chickasawhay River, Leaf River, and Pearl River. The remaining river systems experienced only minor rises.

With above normal soil moisture conditions in eastern sections of Mississippi and near normal rainfall forecast for the next 60 to 90 days, flood potential should remain above normal. Flood potential for the remainder of the area should be near normal due to slightly below to near normal soil conditions and near normal rainfall forecast for the next 60 to 90 days.

Rainfall for the month of November...

<u>RIVER BASIN</u>	<u>RAINFALL</u>	<u>DEPARTURE FROM NORMS</u>
Southeast Arkansas (Chicot & Ashley counties)	4.00 to 6.75 inches	Below normal over west and southern Ashley County to near normal over south Chicot and above normal over north Chicot.
Northeast Louisiana (Tensas, Boeuf, Bayou Macon & Lower Ouachita)	3.75 to 5.25 inches northern sections	Slightly below normal to near normal.
	4.50 to 9.00 inches central sections	Below normal to much above normal.
	7.75 to 11.00 inches southern section	Much above normal.
Lower Yazoo	4.25 to 7.00 inches	Below normal northern sections to near normal to above normal southern sections.

<i>Big Black</i>	<i>5.00 to 7.25 inches upper basin</i>	<i>Near Normal to much above normal most upstream areas.</i>
	<i>4.50 to 5.50 inches middle basin</i>	<i>Slightly below to near normal.</i>
	<i>5.00 to 6.00 inches lower basin</i>	<i>Normal to slightly above normal.</i>
<i>Homochitto/ Bayou Pierre</i>	<i>6.00 to 9.00 inches</i>	<i>Slightly above to much above normal.</i>
<i>Pearl (abv Jackson)</i>	<i>5.00 to 9.00 inches</i>	<i>Slightly below to above normal extreme southeast portions of the basin.</i>
<i>Pearl (Blo Jackson)</i>	<i>3.00 to 7.75 inches</i>	<i>Much below normal over Marion County to much above normal basin above Marion County.</i>
<i>Pascagoula</i>	<i>3.00 to 9.20 inches over the Leaf basin.</i>	<i>Much below normal over Forest and Lamar Counties to much above upstream of these counties.</i>
	<i>3.00 to 3.25 inches over the Black Creek basin.</i>	<i>Much below normal.</i>
	<i>5.25 to 7.00 inches over the Chickasawhay</i>	<i>Normal to much above normal.</i>
<i>Tombigbee tributaries in the JAN HSA</i>	<i>5.50 to 7.00 inches</i>	<i>Slightly to much above normal.</i>

The heaviest rainfall amounts in the HSA for the month were: 11.10 inches at Larto Lake, LA; 9.77 inches at Bienville National Forest (Near Forest), MS; 9.60 inches at Conehatta, MS; 9.38 Jonesville, LA; 9.20 inches at Clayton, LA; 9.15 inches at Forest, MS; 9.14 inches at St. Joseph, LA; 9.01 inches at Vidalia, LA; and 9.01 inches at Natchez, MS

At the Jackson WFO, the November monthly rainfall was 5.49 inches, which was 0.45 inches above normal. We had received 55.36 inches of rainfall through the end of November, which was 4.75 inches above normal.

At Meridian Key Field, the November monthly rainfall was 5.63 inches, which was 0.68 inches Above normal. Meridian had received 67.35 inches through the end of November, which was 14.01 inches above normal.

Mississippi River...

The Mississippi River from Arkansas City to Natchez experienced minor stage fluctuations through around mid month. Then, the river began a steady rise until the end of the month. From Arkansas City to Natchez, the river was

well below seasonal norms for the first two thirds of the month; however, by months end, the river at all points was well above seasonal norms. The provisional high and low stages for November are listed below:

Location	High Stage(ft)	Date	Low Stage(ft)	Date
Arkansas City, AR	21.22	11/30	2.79	11/01
Greenville, MS	32.25	11/30	13.76	11/01
Vicksburg, MS	26.56	11/30	6.18	11/02
Natchez,MS	32.66	11/30	13.36	11/03

Products issued...

Total Flood Warning products issued: 3
Total Flood Statement products issued:15
Daily Rainfall Products (RRA'S) issued 30
Daily River Forecast Products (RVS'S) issued: 30
Daily River Stage products (RVA'S) issued 30

Marty V. Pope
Service Hydrologist

Note: Stage and precipitation data was furnished with cooperation from Mississippi, Louisiana, and Arkansas, N.W.S. Cooperative Observers, United States Geological Survey, United States Army Corps of Engineers and the Pearl River Valley Water Supply District, Pat Harrison Waterway District, Pearl River Basin Development District and the Mississippi Department of Environmental Quality.

cc: USGS Little Rock District
USGS Ruston District
USACE Mobile District
USACE Vicksburg District
USACE Mississippi Valley Division
USGS Mississippi District
SRH Climate, Weather and Water Division
LMRFC
Pearl River Valley Water Supply District
Hydrologic Information Center
Southern Region Climate Center
Pat Harrison Waterway District
Pearl River Basin Development District